

**Practice 6-2****Simplifying Algebraic Expressions****Combine like terms.**

1.  $9j + 34j$   
\_\_\_\_\_

2.  $23s - 12s$   
\_\_\_\_\_

3.  $5t - 12t + 17t$   
\_\_\_\_\_

4.  $6q + 14q - 8q$   
\_\_\_\_\_

5.  $7t - 12t + 4t$   
\_\_\_\_\_

6.  $16w + 7w - 5w$   
\_\_\_\_\_

7.  $y + 13y - 9y$   
\_\_\_\_\_

8.  $5z - 2z - 13z$   
\_\_\_\_\_

9.  $4x + 21x - 6x$   
\_\_\_\_\_

**Simplify each expression.**

10.  $4a + 7 + 2a$   
\_\_\_\_\_

11.  $8(k - 9)$   
\_\_\_\_\_

12.  $(w + 3)7$   
\_\_\_\_\_

13.  $5(b - 6) + 9$   
\_\_\_\_\_

14.  $-4 + 3(6 + k)$   
\_\_\_\_\_

15.  $12j - (9j + 7)$   
\_\_\_\_\_

16.  $-9 + 8(x + 6)$   
\_\_\_\_\_

17.  $4(m + 6) - 3$   
\_\_\_\_\_

18.  $28k + 36(7 + k)$   
\_\_\_\_\_

19.  $3.09(j + 4.6)$   
\_\_\_\_\_

20.  $7.9y + 8.4 - 2.04y$   
\_\_\_\_\_

21.  $4.3(5.6 + c)$   
\_\_\_\_\_

22.  $9.8c + 8d - 4.6c + 2.9d$   
\_\_\_\_\_

23.  $18 + 27m - 29 + 36m$   
\_\_\_\_\_

24.  $8(j + 12) + 4(k - 19)$   
\_\_\_\_\_

25.  $4.2r + 8.1s + 1.09r + 6.32s$   
\_\_\_\_\_

**Solve.**

26. Tyrone bought 15.3 gal of gasoline priced at  $g$  dollars per gallon, 2 qt of oil priced at  $q$  dollars per quart, and a wiper blade priced at \$3.79. Write an expression that represents the total cost of these items.
- \_\_\_\_\_

27. Choose a number. Multiply by 2. Add 6 to the product. Divide by 2. Then subtract 3. What is the answer? Repeat this process using two different numbers. Explain.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_